EDITORS: BOB HEATH, PAULA HARDWICK, CHARLES NOVAK, LINDA NOVAK
PRESIDENT: FRED ENGELBRECHT WEBSITE: www.rarefruit.org (CHARLES NOVAK)
MEETINGS ARE HELD THE 2nd SUNDAY OF THE MONTH @ 2:00 PM.
@ THE TAMPA GARDEN CLUB, 2629 BAYSHORE BLVD, TAMPA

NEXT MEETING: CITRUS TASTING AT THE FAIR, FEBRUARY 10 (SEE BELOW)

CITRUS TASTING EVENT AT THE FLORIDA STATE FAIR SUNDAY, FEBRUARY 10, 8:30 A.M. – 4 P.M.

If you have citrus fruit to donate or know someone who will donate fruit please contact Sally Lee (813) 982-9359, Fred Engelbrecht (927) 943-2104, Paul Branesky (727) 341-2605, Bob Heath (813) 289-1068, or Charles Novak (813) 754-1399. We need as many varieties as possible for the public to sample. The fruit will need to be picked, washed, labeled by variety and arrangements will need to be made to get the fruit to the Fair. *We also need Citrus, Tropical and Rare Fruit for our Display Table. If you have a nice specimen you would like to display, please let us know.

SUNDAY – February 10, 8:30 – 4 P.M. Thanks to all the members who have signed up to help with this event. Members who are helping should plan to be at the Family Living Center Building at 8:30 A.M. We will be very busy cutting up the fruit as we begin offering samples to the public at 10 A.M. Members who have signed up to help with this event will receive their Fair admission tickets in the mail.

If you have questions or need information please contact Sally, Fred, Paul, Bob or Charles. **See 1st paragraph for phone numbers.

RFCI Horticulture Display at the Florida State Fair (Feb. 7 - 18): Fair admission tickets will be mailed to members who have signed up to man our exhibit.

WHAT'S HAPPENING Jan - Feb 2008 By PAUL ZMODA

Our white sapote trees are all in bloom and setting fruit at this time. I am quite excited to see this because white sapotes, like many other fruiting trees, bear much better when more than one cultivar is placed in close proximity to another. We now have 4 different varieties growing well at Flatwoods Fruit Farm. Cross pollination is occurring, thanks to numerous insects, such as honeybees, various sphecid and pollisties wasps, moths, butterflies and some interesting flies like tachnids and other flies, one of which resembles flower beetles in their coloration, a curious imitation.

White sapotes will grow mostly trouble free wherever citrus can be grown. They may be propagated by seeds, which will not grow true to type, by air layering or by grafting. The latter 2 methods ensure that the resulting tree will produce fruit of the same quality, in most cases, as the mother tree. These trees will also usually make fruit sooner than seedling trees. By the way, a seedling is not just a tiny plant grown from seed, but any tree, even ancient, which was propagated from seed.

Our "Moreland" pecan finished dropping its crop of nuts. These are shucked from their hulls and air dried a while before briefly oven roasting. I look forward to eating these delicious energy packed morsels every year.

FOURTH FRUIT PHOTO CONTEST

 $1^{\rm ST}$ PRIZE: A ONE YEAR MEMBERSHIP IN THE TAMPA BAY CHAPTER RFCI $2^{\rm ND}$ PRIZE: ONE YEAR SUBSCRIPTION TO 'FLORIDA GARDENING'

Following are the rules for the Fruit Photo Contest:

Judging Guidelines:

- > Submitted photos will be exhibited at the club meeting for members to vote for best photo.
- > Images should emphasize composition, design and color esthetic value.
- > People, hands, rulers and other extraneous objects are undesirable.
- > Pictures of fruit, flowers or foliage attached to plants are preferred in lieu of cut and displayed artificially.
- > Fruits, buds, flowers, roots or any vegetative plant parts are suitable subjects, but all should be recognizable as a source of edible produce.
- > Pictures of plants grown strictly for aroma, animal feed or as ornamentals are inappropriate.

General Rules:

- 1. Any member of the Tampa Bay RFCI may enter.
- 2. All entries become Tampa Bay RFCI property and will not be returned.
- 3. Only color prints will be accepted no digital images.
- 4. By submitting entries, the entrants warrant that they are the originators, and grant to the RFCI the right of reproduction with credit to the originators.
- 5. Winning photos will be determined by a vote of the general membership at the next club meeting after the deadline of June 30, 2008.
- 6. Entrants will be limited to a maximum of 3 prints.
- 7. Include your name and brief description with each photo; write this information on a sticky and attach to the back of the photo.
- 8. Photos must be received by June 30, 2008.
- 9. Address all entries to: Linda Novak

Secretary - Tampa Bay RFCI

2812 N. Wilder Road Plant City, FL 33565-2669

Programs/Events

February 7-18: February 10:

Manning the Horticulture Exhibit at the Florida State Fair Citrus Tasting event at the Florida State Fair. No regular

meeting at the Tampa Garden Club.

TASTING TABLE

JANUARY 2008

Saceda-Bigelow	Pork/chicken Adobo	Zmoda	Watermelon
Coronel	Fried rice, fresh papaya	Tamura	Deviled eggs
S. Lee	Pineapple upside down cake	Topping	Noodles
Moranto	Bayou brownies, hot pizza	Premraj	Papa dom
Shigemura	BBQ brisket, ribs, sausage, chicken	Palis	Bok choy salad
Sawada	Salad, fruit shortcake, baked beans	Newcombe	Carambola
Mullen	Sweet potato-rice pudding	Harris	Key lime cookies
Musraves	Chicken-veg. Casserole	Terenzi	Apple walnut cake
Phillos	Chamorrita Lunpia	Sweet	Arnotts tartlets
Whitfield	Roasted turkey breast		
Novak	Fruit & veg. kabobs, cheesecake with passion fruit & pineapple topping.		

Tropical cheese spread with crackers, juices

And many other delicious foods not listed on the signup sheet. Thanks to everyone who contributed to the Tasting Table. Remember to ask for your free plant exchange ticket.

Tampa Bay RFCI Board of Directors election In March: If you are interested in serving on the Board of Directors, please contact a member of the Nominating Committee: Sally Lee (813) 982-9359, Paul Branesky (727) 341-2605, Thom Scott (813) 933-1144. The list of candidates will be published in the March newsletter and will be presented at the March 9 meeting. The Board will be elected by a majority vote of the membership present and voting.

New members: Nancy & Rick Alguire Sun City Center

Grafting tape and grafting Parafilm is available for purchase by members who would like to graft their own plants. **RFCI Polo Shirts** (\$15) are also available. Contact Charles Novak (813) 754-1399.

JANUARY PLANT EXCHANGE

PLANT	DONOR	WINNER
Loquat	Bob Heath	?
Carob	66	Ed Andrews
Cabeluda	44	Ed Musgrave
Pink Guava	44	?
Pineapple	44	S. Sweet
Red Passion Fruit	44	?
Mamey Sapote	66	R. Harris
Yellow Passion Fruit	46	Ed Musgrave
Surinam Cherry	46	R. Harris
Surinam Cherry	Bob Heath	Ed Andrews
Cattley Guava	Charles Novak	Steven Woolheater
Cattley Guava	66	?
٠,	66	?
66 66	46	?
Lemons & Limes	Linda Novak	Teresa Klingler
Passion Fruit	66	Bob Heath
Pummelo	"	?
Macadamia Nut Tree	Sonia F. Saceda-Bigelow	Marilyn Whitfield
	66	?
T. Plant	64	Francis Pillos
Lemons	Vega	Bob Klingler
44	44	?
Avocado	"	?
Mango	44	?
Mandarin Orange		R. Shigemura
"	44	R. Terenzi
44 44	Vega	R. Harris
Orange berry	Ed Musgrave	?
Black Pepper	66	?
	66	S. Saceda-Bigelow
Rangoon Creeper Nut	66	?
Jewels of Opar Spinach	Ed Musgrave	S. Saceda-Bigelow
Carambola fruits	Judy Cimafranca	?
	44	?
Papaya fruits	Ed Andrews	?
Myers Lemons	Verna Dickey	?

The ANNONAS by Har Mahdeem

For many years I have been very interested in the *Annonaceae* family, which is the botanical family that contains the Annona genus and many other genera, many of which produce edible fruit. It is estimated that here is something like 2500 species in the family and something like 120 genera which contain all those species. Several dozen of those genera produce edible fruit. Now I'm only familiar with a few of them, 2 or 3 dozen, and that is still so much material that I cannot cover it all in one lecture, so I have several lectures on Annonas. The title of this lecture is The Sugar Apple And Its Close Relatives. Today I will not be talking about the soursop and its relatives nor the northern pawpaws, or other fruits in this group.

The first slide shows a flat full of sugar apples of the common green skinned type at a farmers market in Brazil. The sugar apple is thought to be native to western Mexico, probably the Vera Cruz area or the Yucatan Peninsula. It was appreciated by the first Europeans, the Spanish who became acquainted with it. Sugar apple seeds will remain fertile for several months, up to a year, so the Spanish started distributing them. Pretty soon the Portuguese, British & French, etc. became acquainted with them so the sugar apple soon spread throughout the Tropics. This was so long ago that now people in India think the sugar apple is native to India and people in Brazil think it's native to Brazil and so on.

The genus is Annona, which comes from the word the Indians used in the Islands of the Caribbean. They called it anon. Species is squamosa, which means scaly. Fruit are designated by a 2-part name. The first part is the genus and the second is the species. In the case of the sugar apple, it is *Annona squamosa*.

The next slide shows a sugar apple plant growing in Brazil and in its original range in the Yucatan Peninsula. It is the largest sugar apple tree I have ever seen looking down on it from the temple of the warriors in Chickenitza, the ancient Mayan city ruins. It is growing in a rocky limestone soil with a little clay.

There is another variety of sugar apple which is seedless. If it's picked mature before it splits on the tree, the flavor is reasonably good, but if you wait until it splits on the tree, it will dry out rather fast and taste similar to cardboard, pretty tasteless. I see no advantage to growing the seedless variety. It seems the more seeds the sugar apple has, the bigger it gets, the more pulp is available and the better the flavor. But, as the name implies, sugar apples are very sweet. They're not called sugar for no reason. Some of them have a little bit of other flavors but what really dominates is the sweet. In some you can detect a little honeysuckle flavor or cinnamon flavor. Because of the cinnamon flavor, the name in Dutch and German is cinnamon apple.

There are other varieties of sugar apple. The next slide shows one that is not commercially available from an experiment station in Yucatan. The skin is very thick, it has a good color and the flavor is very rich or sometimes not fit to eat, and the tree usually will not set fruit without hand pollination, which is the reason nobody has bothered to commercialize it. I mention the skin on this sugar apple because most sugar apples have a very thin skin even though you see those great big thick bumps on them. Between the bumps the skin is very thin. So the sugar apple that ripens off the tree will split and fall usually piece by piece or in one big blob, splat. But the fruit is much less seedy than the common one. It is one that we use to breed with and is useful for that purpose.

The Compang sugar apple and the Red sugar apple are very similar and have the same thin skin as the green colored fruit. This is a picture of one we tried to cut open and it just kind of broke apart and had over 100 seeds. But the seeds are very smooth and the pulp doesn't adhere so the seeds can be spit out just like watermelon seeds. You can't tell any real difference between the flavor of the green and the red one; they're just prettier.

Now on to the next species, *Annona cherimoya*. In the same manner that the word "apple" gets used a lot - we even have apples on pine trees, the pineapple, and we even use the apple of our eye and so on – in Spanish speaking countries the fruit named cherimoya has really been distributed. So if a Spanish speaking person speaks of the

cherimoya, they are talking about fruits that are related but are not necessarily the one we call cherimova. This slide shows the true cherimova. We can call it the true cherimoya because we know where the name came from. It came from the Indian language. Like the sugar apple, many of the cherimoyas are bumpy with smooth rounded points. Cherimoya is not a Spanish word at all. The true cherimoya has rounded leaves that are fuzzy. Some of them are very smooth and do not have the attractive points. Likewise, as you can see, the cherimoya is not as seedy as a sugar apple. Cherimoyas have a much richer flavor than sugar apples but vary a great deal from one to another. If you don't like the first one you eat, don't give up on cherimoyas. Chances are, you'll like the next one if it's a different variety.

The next slide shows the cherimoya flower in the female stage. It looks like a 3-legged stool, and this one shows the male stage. Notice the 3 petals spread very widely. It is the same flower but the male stage comes the next day; first day, female; second day, male. The male flower cannot fertilize itself because on the second day the female parts are no longer interested. On the first day the inside part of the flower are sticky and shiny with some 80 parts in the female flower. Around the female parts is what looks like a doughnut while the female parts are active. But the next day the female parts are dried over and the doughnut is like a chandelier with a bunch of loose anthers and loose pollen.

In nature the flower is fertilized by little beetles. The female flower smells very good to the beetle. The little beetles visit the male flowers and then fly in and sleep in the female flower. As the beetle eats the pollen in the male flower, he gets his little body all covered with pollen, so when they go to sleep off their full belly in the female flower, they leave the pollen all over the sticky female parts. These little beetles, incidentally, are the ones you see swarming about rotten citrus fruit laying on the ground. So it may behoove us to take damaged citrus fruit and distribute it around our cherimoya trees when they are in flower. Without the little beetles, you may have to hand pollinate the female flowers in order to get fruit.

Get a little pill jar and a water color paint brush,

put your pill bottle under the 3 petals of the flower and stick the brush up in to the middle of the flower to knock the anthers and the pollen into your jar. Do this on several flowers if they're available, then go to a female flower, put the brush up inside it and get some of the stickum on it, put it back into the pill jar and lots of pollen will stick to it. Then put it back up in the female stage flower and move the brush around and back into the pill bottle to get some more pollen and back into the female stage flower, remembering that there are something like 100 female parts and each one needs to be pollinated. If you only pollinate part of them, the fruit will develop poorly, lopsided or asymmetrical or misshapen. Cherimoya sheds its pollen in late afternoon. With the sugar apple, the pollen is usually available early in the morning, just before, during, or just after sunrise.

This next slide shows the Annona reticulata. We have the word 'reticul' which is technical and not used very much. It means 'with-a netted pattern' because some of the fruit of this species have a scaly pattern that somewhat compares to a net. In Florida we usually call it custard apple. Down in the English islands it's known as bullox heart. In some places in Florida it's confused with the pond apple. But in Cuba it's called cherimoya. The leaves are pointed and not hairy, but shiny. The custard apple comes in many colors. As you can see from this slide, it has many seeds but they are quite small and there's a lot more pulp than in any other species we're looking at. The skin is extremely thin so when eating them with a spoon, your main annoyance is that you will punch through the skin. The texture of the custard apple may vary a great deal. While some are very creamy and pudding like, which is where the name custard apple comes from, others are gritty like some pears, with tiny hard nodules, and some you may even call sandy, gritty enough to make you cough by irritating your throat. The Sardinia variety is one whose seedlings are available from nurseries and end to come reasonably close to the mother plant and tends to be a very good quality and very productive, but not nearly as colorful as some cherimovas.

The next slide shows the San Pablo variety which is very productive and a high quality, very smooth and creamy. Most custard apples are very sweet

and creamy but with very little tartness. The Tikal has a kind of strawberry taste and is more tart. Occasionally we get over production which is not good. Here's a tree in early stage where I took most of the little fruit off the tree but I waited too long and the remainder of the fruit did not become fit to eat. If I had taken most of the fruit off when they were very little, the tree would have had the chance to size up the remaining fruit. This shows several extreme examples: there's a branch with 5 fruit on it and no leaves and you see two examples of more than one fruit in a flower cluster. None of these will develop properly and be fit to eat. You need 1 or 2 fruit on a branch with plenty of leaves on that branch so you get appropriate feeding to the fruit so they can size up and be sweet. The custard apple has a different season for fruiting. While the sugar apple and cherimoya fruit in the late summer and fall, the custard apple fruits in late winter or spring. The San Pablo is an early one, usually fruiting in late February, and most of the other varieties will fruit about a month later. mid March to early April. This is a good reason for having a custard apple along with your other annonas because it fruits at a different time of year.

None of these are what you'd call cold hardy trees. If the temperature goes below about 28, they will all have some cold damage. But they are more cold hardy than soursop and rollinia and some of the others. A close-up of that problem branch shows no leaves and many fruit. Only the biggest fruit in the picture should have been left on the branch. The closer the fruit are to the main trunk, the more likely they will size up and be tasty. These were in the same flower cluster and there was not physical space for any of them to size up.

The next species we're looking at is the Annona diversifolia, with diverse leaves or foliage which means there are different shaped leaves on the same tree. In Mexico it's called ilama. Here in Florida we usually use the Mexican name of ilama, which in Spanish means 'old woman'. These fruit always split if they're good. If you get a fruit from an ilama tree that has fallen off without splitting, you will know that it's no good. If it's picked close enough before it splits, it is edible but isn't as pretty, the texture isn't as good and it definitely will not taste as sweet. The pulp

in the ilama tends to adhere to the seeds so when you spit them out, the seeds may not be as smooth and shiny as those in other annonas. The skin is thick and leathery which makes it easier to eat with a spoon.

The next slide shows the diverse foliage. You can see the first leaves have no leaf stem but the later leaves do have a leaf stem. This slide shows the female flower on the left & the male flower on the right. Here you can see the Hanover Red, which has a bright red flesh outside & inside, and the Hanover White which is almost white. When the ilama first splits open, it is still hard and inedible and the split will usually heal over and reseal the fruit. After the pulp softens and the fruit splits again, the sweet aroma will attract the fruit flies and people to harvest it. The ilama is very aromatic or perfumey, and the flavor is sweet and tart, quite refreshing. However, it is not very productive and in Florida it ripens during the rainy season, so the fruit tends to have a lower quality and is usually susceptible to attack by potato leaf hoppers, which are tiny green bugs that run sideways, for which the only cure seems to be spraying with an insecticide.



SUGAR APPLE

equipment needed by a gardener wishing to Without doubt the most important piece of propagate plants is a knife. Choosing it is perhaps one of the most difficult decisions to make, as so much depends on what sort of work it will be required to carry out.

For most tasks, a medium-weight knife with a sharp carbon-steel blade is best. For grafting, select a fairly heavy knife.

an ordinary propagation knite is really quite adequate. For very soft cuttings from plants A budding knife has a spatula end for stemons the best tool is a single-edged razor such as dahlias, chrysanthemums and penblade (that is, a one-sided blade with a thick prying open flaps of bark. It is a useful luxury metal-covered edge on the opposite side.

Most gardeners use a knife with a straight cutting blade, which is easy to sharpen, but some prefer a slightly curved blade. A knife with a very curved or hooked blade is not

is also <u>...</u> suitable for plant propagation. extremely difficult to sharpen.

A knife should always be easy to open and with knives that may be required to cut tough material, the blade when opened should be set back into the handle. This avoids comfortable to hold when in use. Especially excessive play from side to side so that the blade does not loosen.

patterns. As a general rule the more expensive Knife blades are either hollow ground on both sides or on one side only; both types are made in both right-handed and left-handed a knife is, the better is the quality of blade and overall design. A good-quality steel blade will longer than one of poorer quality and is well equally efficient. One-sided knives are usually maintain its sharp cutting edge considerably worth the extra investment.

Keep a knife just for propagation and do not use it for pruning, cutting string or the

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1,001 other jobs for which an ordinary penknife is more than suitable.

fact if a few basic rules are observed it is garded as a difficult and specialist job, but in relatively simple provided that a straightbladed knife is used and that the sharpening is carried out on a broad, flat Carborundum stone with a coarse and fine side. The stone should be slightly lubricated with a light oil to Push the blade gently along the coarse side

To sharpen a knife successfully is often re-

Sharpening a knife

should be cut by holding the plant material in the left hand. With the knife blade below Cut soft wood against a clean pane of glass on the bench in the potting shed. Hard wood the stem and the right thumb above, make a shallow angled slice from beneath, drawing the right forearm backward and maintaining the gap between the right thumb and the blade. Never attempt to cut by pressing the blade toward the thumb—it can have disastrous consequences.

When using a knife for cutting plant material the blade will inevitably become clogged with resins and plant juices, and these will impair the cutting efficiency. Therefore after use clean the blade either with a rag dipped in a solvent such as gasoline or carbon tetrachloride or by rubbing the blade with a fine grade of emery paper.

unevenly worn.

turns, repeat the operation on the other side of the blade. Always traverse the entire length of the stone so that it does not become All sorts of curved and small sharpening used to sharpening knives they are difficult to

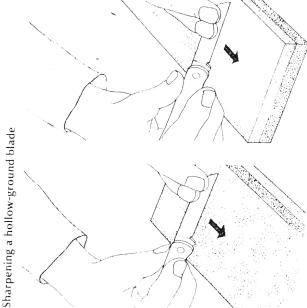
of the stone; then repeat the movement. Give a final "rub" on its fine side. After several

aid easy movement.

Sharpening a flat-ground blade

stones are available, but for someone not

handle and use effectively.



with the spatula end of a 3 Pry open flaps of bark

2 Use a knife with its blade well set back into the

handle.

straight cutting edge as at 1 Choose a blade with a

is simple to sharpen.

CUTTING HARD WOOD Hold plant material in left hand, With blade below stem and right thumb drawing right forearm ing gap between right

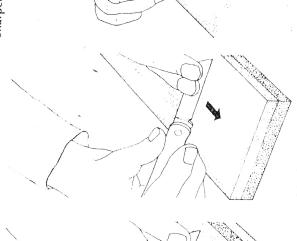
thumb and blade.

above, make a shailowangled cut from beneath, backward and maintain-

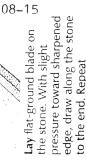
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budding knife.

acute angle to the stone. 1 Pour a little oil on the tacing forward at a very coarse side of a Carborundum stone. Hold a hollow-ground blade



movement several times. Give final rub on the fine 2 Push gently along the stone. Lift, and repeat side of the stone.

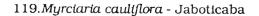


to the end. Repeat movement. 118. Feijoa sellowiana - Feijoa, Pineapple guava



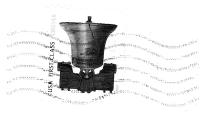
A cold hardy, evergreen plant to 15 feet, native to South America. Leaves and bark are grayish and silvery and hairy beneath. White, thick flower petals are edible. They have a purplish tinge on the inner side and crimson stamens. Roundish fruit is gray-green in color and up to 3 inches in length. Pulp is white and has a good flavor. Fruit is eaten fresh or used for jellies. New plants are started by seed or cuttings.

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Evergreen tree that seldom exceeds 15 feet in Florida. The plant is native to Brazil where it is one of the most popular native fruits. Leathery, dark green leaves are up to 2 inches long and about 1/2 inch wide. Clusters of white flowers are produced along the trunk and branches of plant. Fruit resembles grapes in shape, size and purplish-black color with thick skins. With proper care, the tree will produce 5 or 6 separate crops per year. Fruit is eaten fresh, used for a good quality jelly, or made into juice or wine. New plants are stated by seed.



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